

Patent Claims:

1 – 9 (canceled)

10. (new) A method for determining a phase position of a camshaft of an internal combustion engine with a crankshaft, a camshaft and a setting mechanism such that a phase position of the camshaft can be adjusted in relation to the crankshaft, comprising:

determining the phase position in accordance with a detected crankshaft angle and a recorded camshaft angle;

determining a filter coefficient of a filter in accordance with an amplitude of an oscillation of the phase position and the modification of said phase position; and

determining a filtered phase position of the determined phase position by the filter.

11. (new) The method according to claim 10, wherein the filtering takes place by a non-recursive filter of the first order.

12. (new) The method according to claim 10, wherein the modification of the phase position is filtered and the filter coefficient is determined in accordance with the filtered modification of said phase position.

13. (new) The method according to claim 12, wherein the modification of the phase position is filtered in accordance with the rotation and an oil temperature.

14. (new) The method according to claim 12, wherein the modification of the phase position is filtered in accordance with the rotation or an oil temperature.

15. (new) The method according to claim 10, wherein the amplitude of the oscillation of the phase position is filtered and the filter coefficient is determined in accordance with a filtered amplitude of the oscillation of the phase position.

16. (new) The method according to claim 15, wherein the amplitude is filtered in accordance with the rotation and the oil temperature.

17. (new) The method according to claim 15, wherein the amplitude is filtered in accordance with the rotation or the oil temperature.

18. (new) The method according to claim 10, wherein reducing the filter coefficient within a predetermined moment in time or within a predetermined crankshaft angle section is limited to a predetermined threshold value.

19. (new) The method according to claim 10, wherein filtering is undertaken by a non-recursive filter of the first order.

20. (new) A device for determining a phase position of a camshaft of an internal combustion engine, comprising:

- a crankshaft shaft;

- a camshaft;

- a setting mechanism for setting the phase position of the camshaft such that the camshaft can be adjusted in relation to the crankshaft;

- a first means provided for determining the phase position in accordance with a detected crankshaft angle and a recorded camshaft angle;

- a second means provided for determining a filter coefficient of a filter in accordance with an amplitude of an oscillation of the phase position and the modification of said phase position; and

- a third means provided for determining a filtered phase position of the determined phase position by using the filter.